

## NASA Weekly Update

Week of May 30 - June 2, 2006

**6-1-06:** NASA Presents Exploration Program Update: NASA Administrator Michael Griffin, Associate Administrator for the Exploration Systems Mission Directorate Scott Horowitz and Constellation Program Manager Jeff Hanley will brief the media about the exploration program and the work being assigned to NASA centers at 2:30 p.m. EDT Monday, June 5. The briefing will be in the NASA headquarters auditorium, 300 E St. S.W., Washington. To listen to the event on the Web, visit: <a href="http://www.nasa.gov/newsaudio">http://www.nasa.gov/newsaudio</a>.

**6-2-06: NASA Welcomes European Space Station Module:** NASA is celebrating the arrival of an important component to the International Space Station, the Columbus research laboratory. Columbus is the European Space Agency's primary contribution to the station.



Columbus, the European Space Agency's research laboratory, is moved under escort past the Vehicle Assembly Building.

It arrived at NASA's Kennedy Space Center, Fla., Tuesday from Germany. Over the past week, it was unloaded from its transport aircraft and taken to its temporary home in Kennedy's Space Station Processing Facility, where it will be prepared for launch. It was welcomed Friday in a ceremony attended by guests from both sides of the Atlantic. For information about Columbus and the International Space Station, visit: <a href="http://www.nasa.gov/station">http://www.nasa.gov/station</a>.

6-2-06: NASA's Next Space Shuttle Crew Participant in Countdown Test: The astronauts and ground crews for Space Shuttle Discovery's upcoming mission, STS-121, will go through a full launch dress rehearsal at NASA's Kennedy Space Center, Fla., June 12-15. Media are invited to attend events surrounding the terminal countdown demonstration test, and some of the activities will air on NASA TV. The demonstration test provides the crew of each shuttle mission with an opportunity to participate in various simulated countdown activities, including equipment familiarization and emergency egress training. Since dates and times of events are subject to change, updates are available by calling: 321-867-2525. For information about the STS-121 mission and crew, visit: http://www.nasa.gov/shuttle.

6-2-06: NASA Announces Mars Science Lab Mission Launch Contract: NASA's Kennedy Space Center in Florida has selected Lockheed Martin Commercial Launch Services Inc. to deliver an Atlas V rocket for the Mars Science Laboratory mission to carry a large rover to the red planet in the fall of 2009. The six-wheeled rover will explore Mars for two years, examining sites to identify where the building blocks for life may exist. For more information about the Mars Science Laboratory mission, visit: <a href="http://mars.jpl.nasa.gov/missions/future/msl.html">http://mars.jpl.nasa.gov/missions/future/msl.html</a>.

5-31-06: NASA's Fuse Mission Discovery Featured in Media Briefing: NASA will host a media teleconference at 1 p.m. EDT Wednesday, June 7, about the discovery of carbon-rich gas around a young star that may be forming terrestrial planets. The discovery was made with NASA's Far Ultraviolet Spectroscopic Explorer spacecraft and will be featured in the June 8 issue of Nature. Participants:
-- Aki Roberge, NASA Postdoctoral Fellow, Goddard Space Flight Center, Greenbelt, Md. (cont'd on pg. 2)

- -- Conel Alexander, Department of Terrestrial Magnetism, Carnegie Institution of Washington
- -- Marc Kuchner, ExoPlanets and Stellar Astrophysics Laboratory, Goddard Space Flight Center, Greenbelt,

Audio of the briefing will be streamed at: <a href="http://www.nasa.gov/newsaudio">http://www.nasa.gov/newsaudio</a>. For information about NASA TV and links to streaming video, visit: <a href="http://www.nasa.gov/ntv">http://www.nasa.gov/ntv</a>.

## Weekly Status Reports



The residents of the International Space Station ventured outside their orbital home Thursday night to conduct a 6-hour, 31-minute spacewalk to repair, retrieve and replace hardware on the U.S. and Russian segments of the complex. Clad in Russian Orlan spacesuits, Expedition 13 Commander Pavel Vinogradov and NASA Flight Engineer and Science Officer Jeff Williams opened the hatch to the Pirs Docking Compartment airlock at 6:48 p.m. EDT to begin the 65th spacewalk devoted to station assembly and maintenance. It was the sixth spacewalk for Vinogradov and the second for Williams. The spacewalk began as the station flew 220 miles over southern Asia.

After setting up tools and tethers outside Pirs. Vinogradov and Williams used the telescoping boom, designated Strela, attached to the airlock to transport them to the forward area of the Zvezda Service Module that connects to the Zarya Module. There, Vinogradov installed a new nozzle to a valve that helps vent hydrogen into space from the Elektron oxygengenerator in Zvezda. Elektron uses the process of electrolysis to separate hydrogen and oxygen from water in the system. Oxygen is circulated into the cabin atmosphere while hydrogen is vented overboard. An existing nozzle on the hull of Zvezda used for that purpose had become clogged, reducing Elektron's efficiency, forcing Elektron to use the same vent line currently employed by a contamination monitoring device.

Two weeks ago, Vinogradov rigged a vent line inside Zvezda as the precursor to the installation of the new vent valve nozzle on the exterior of the module. The refurbished Elektron is scheduled to be reactivated on Monday. Next, the two moved to the aft end of Zvezda where they took pictures of one of several antennas designed to provide navigational information for the unpiloted docking of the European Automated Transfer Vehicle (ATV), scheduled to make its maiden flight next year. Russian engineers suspect the antenna's cable may have prevented a cover on one of Zvezda's reboost engines from opening during an aborted test firing earlier this year. Later, Vinogradov took up cable slack from another ATV navigation antenna and took pictures for technicians to study.

While on the Russian segment of the station Vinogradov removed a device called Kromka from Zvezda's hull has collected jet thruster residue while Williams retrieved the third in a series of three canisters from the outside of Pirs in an experiment called Biorisk that studied the effect of the space environment on microorganisms. Both Kromka and Biorisk were brought inside and will be returned to Earth.

Williams also collected a contamination monitoring unit from Pirs and returned it to the cabin for later analysis. With the crew slightly behind schedule, a decision was made to extend the maximum time for the spacewalk. Following that decision, control of the spacewalk was handed from the Russian flight control team at the Russian Mission Control Center outside Moscow to the U.S. flight control team at Mission Control, Houston, as planned.

The next station status report will be issued Friday, June 9. For more about the crew's activities and station sighting opportunities, visit: <a href="http://www.nasa.gov/station">http://www.nasa.gov/station</a>.



--June 22, 10 am - 5 pm: NASA Exhibits in the Rayburn Foyer.

--July 1: Launch of Space Shuttle Discovery, STS-121 --July 20: Mars Viking Anniversary Event in the Rayburn Foyer.

Please send <i>A Look at NASA</i> Newsletter to me.	
Name	Address
Title	City
E-mail address (required)	State Zip Code
Work PhoneHome Phone	Please print and Fax to (202) 358-4340 or e-mail Lisa.Gibson@nasa.gov